

CLAIMS

Therefore, having thus described the invention, at least the following is claimed:

- 1 1. A video system comprising:
2 an image capture system configured to capture a plurality of frames of a video
3 clip;
4 a sequence data generating system for generating data indicative of frame
5 position of each of the plurality of frames;
6 an orientation sensor configured to provide orientation information for each of
7 the plurality of frames at the time each frame is captured; and
8 a processor configured to incorporate the orientation information and sequence
9 data into each frame.

- 1 2. The system of claim 1, wherein the orientation information resides in a
2 frame header of each frame.

- 1 3. The system of claim 2, further comprising a memory configured to
2 receive each frame wherein the orientation information resides.

- 1 4. The system of claim 1, further comprising a display configured to
2 display each frame using the orientation information, such that the displayed frame is
3 oriented the same as an orientation of the image capture system when the frame was
4 captured.

1 5. A method for creating a frame of a video clip, the method comprising
2 the steps of:
3 capturing an image with an image capture device;
4 generating a frame having at least image data corresponding to the captured
5 image and sequence data indicative of a frame position in the video clip;
6 sensing an orientation of the image capture device at the time the image is
7 captured; and
8 incorporating the orientation information corresponding to the sensed
9 orientation into the frame.

1 6. The method of claim 5, further comprising repeating the steps of claim
2 6 to capture a plurality of serially sequenced frames corresponding to the video clip.

1 7. The method of claim 5, wherein the step of incorporating the
2 orientation information comprises incorporating the orientation information into a
3 header of the frame.

1 8. The method of claim 5, wherein the step of incorporating the
2 orientation information comprises incorporating the orientation information into the
3 frame as a file.

1 9. The method of claim 5, wherein the step of incorporating the
2 orientation information comprises incorporating the orientation information into the
3 image data.

1 10. The method of claim 5, further comprising the step of saving the frame
2 to a memory comprising a plurality of serially sequenced frames corresponding to the
3 video clip.

1 11. A method for displaying a frame of a video clip, the method
2 comprising the steps of:
3 receiving the frame having at least image data and sequence data
4 corresponding to an image captured by an image capture device;
5 receiving orientation information residing in the frame;
6 determining an orientation of the frame, the orientation of the frame
7 corresponding to the orientation of the image capture device at the time the image was
8 captured; and
9 displaying the frame oriented in accordance with the determined orientation.

1 12. The method of claim 11, further comprising the step of selecting the
2 frame from a plurality of serially sequenced frames corresponding to the video clip.

1 13. The method of claim 11, further comprising the step of receiving the
2 orientation information from a header of the frame.

1 14. The method of claim 11, further comprising the step of retrieving the
2 frame from a memory.

1 15. The method of claim 11, further comprising the steps of:
2 communicating the frame from an image capture device to a processing
3 device; and
4 displaying the frame on a display coupled to the processing device.

1 16. The method of claim 11, further comprising displaying the frame on a
2 display coupled to the image capture device.

1 17. A system for providing orientation information for frames of a video
2 clip, comprising:
3 means for capturing an image;
4 means for generating a frame having at least image data corresponding to the
5 captured image and sequence data, wherein the frame is one of a plurality of serially
6 sequenced frames corresponding to the video clip;
7 means for sensing an orientation of an image capture device at the time the
8 image is captured;
9 means for incorporating the orientation into the frame; and
10 means for storing the frame with the orientation in a memory.

1 18. The system of claim 17, further comprising a means for generating
2 orientation information from the orientation of the image capture device such that the
3 orientation information is incorporated into the frame.

1 19. The system of claim 18, wherein the means for incorporating
2 comprises means to store the orientation information in a header of the frame.

1 20. A computer-readable medium having a program for displaying a frame
2 of a plurality of serially sequenced frames corresponding to a video clip, the program
3 comprising logic configured to perform the steps of:
4 retrieving the frame from a memory, the frame having at least image data
5 corresponding to a captured image that was captured by an image capture device and
6 sequence data;
7 receiving orientation information residing in the frame;
8 determining an orientation of the frame, the orientation of the frame
9 corresponding to the orientation of the image capture device when the image was
10 captured; and
11 displaying the frame in accordance with the determined orientation.

1 21. A computer-readable medium having a program for providing
2 orientation information for a frame of a video clip, the program comprising logic
3 configured to perform the steps of:
4 receiving information from an image capturing system, the information
5 corresponding to a captured image;
6 generating a frame having at least image data and sequence data corresponding
7 to the captured image, wherein the frame is one of a plurality of serially sequenced
8 frames corresponding to the video clip;
9 sensing an orientation of an image capture device at the time the frame is
10 generated; and
11 incorporating the orientation into the frame.

1 22. A video clip comprising:
2 a first frame comprising image data, video sequence data and image
3 orientation data; and
4 a second frame comprising second image data, second video sequence data and
5 second image orientation data, the second frame serially sequenced immediately
6 behind the first frame.